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Historisk-filologiske Meddelelser **XXVI**, 5.

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# PAPYRUS CARLSBERG NO. VIII

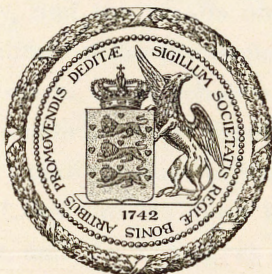
WITH

## SOME REMARKS ON THE EGYPTIAN ORIGIN OF SOME POPULAR BIRTH PROGNOSES

BY

ERIK IVERSEN

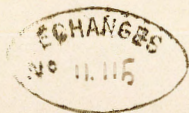
WITH 2 PLATES



KØBENHAVN

EJNAR MUNKSGAARD

1939





## PREFACE

Originally the object of the work with the present fragments was merely to produce an edition of the texts with a transliteration and a translation, as a contribution to a field in Egyptian medical literature, in which very little material has survived, and this is still its principal aim.

Very soon, however, it became clear that the prescriptions contained such valuable contributions to our knowledge of the importance of the Egyptian birth-prognoses for the later medical tradition, that some remarks on their history seemed indispensable. The problem had already been attacked by various Egyptologists but a satisfactory solution had never been given, and the current theories did not seem able to stand the test of a closer examination. As for the present historical remarks they are not made by a student of medical history, and the results obtained do not claim to be definite solutions of the problems, but they may help to point out the ways in which scholars with a better knowledge of classical medicine may obtain further results.

In conclusion I take pleasure in thanking my honoured teacher Dr. H. O. LANGE for his never failing interest in the work of his pupils, and Mr. A. VOLTEN for much help especially with the Greek sources.



### The Papyrus.


The fragments belong to the papyrus collection owned by the Carlsberg Foundation and deposited in the Egyptological Institute of the University of Copenhagen.

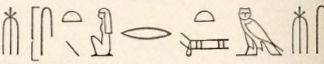
As it will be seen from the plates they are in a very bad condition, but they have been excellently preserved and treated by Dr. IBSCHER.

They are inscribed on both sides in two different hands, most probably dating from the time about the 19—20th dynasty. The recto contains scanty fragments of a treatise on the diseases of the eyes, almost word for word identical with the corresponding chapters in papyrus Ebers, but most unfortunately too damaged to be of any value or interest. The verso, with which we are concerned in the present edition, contains the remains of prescriptions dealing with gynaecological subjects.

They consist of the remnants of two connected pages, the last line in pl. I ( $x+7$ ) being continued in the first line of pl. II, neither of the pages being intact. The large fragment C, which was for a long time placed separately as belonging to a third page, can with absolute certainty be placed at the end of pl. II (fragment B) so that only c. 3 groups are missing between the two fragments<sup>1</sup>.

The length of the remaining fragments of pl. II can then be fixed at about 23 cm., and as it can be seen from the context that c. 8 groups<sup>2</sup> are missing at the end of the line, and since eight groups in this manuscript correspond to

<sup>1</sup> Proved by the certain restoration  in line 1.

<sup>2</sup> Corresponding to the insertion of  at the end of the line. To the orthography see I, x + 6.

c. 7 cm., the length of each full line in the original can be fixed approximately at 30 cm.

As only 17 cm. remain of pl. I, this means that in this page c. 13 cm. have been lost at the beginning.

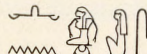
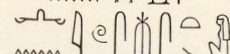



The height of the fragments is 10 cm. for the upper part of pl. I, and  $9\frac{1}{2}$  for the lower; in pl. II it is 10 cm.

### The text.

The fragments belong to the same category of texts as are found on the verso of the medical papyrus in Berlin<sup>1</sup> and in the medical parts of the papyri from Kahun<sup>2</sup>, dealing with prognoses on conception, sterility, and the sex of the unborn child.

It has already been mentioned that it seems possible for palaeographic reasons to assign them to the time about the 19th dynasty, but the dating of the text itself presents some difficulties.

The text, which has a fairly correct orthography<sup>3</sup>, gives some strange interchanges of classical and slightly younger forms in parallel constructions.

The correct futuric  (II, 3 and I, x + 6), for instance is given as  in I, 5. The correct feminine of the negative participle  (II, 4), has in I, x + 6 the form , and once just at the beginning of the text (I, 1), we even find  as the definite article.

<sup>1</sup> ed. WRESZINSKI, *Die Medicin der alten Aegypter*, Bd. I, Berlin 1909.

<sup>2</sup> ed. GRIFFITH, *The Petrie Papyri*, Pl. V—VII. London 1898.

<sup>3</sup> The writing is clearly related to that of the papyrus from Berlin which has been assigned to the same period. See W.'s introduction op. cit. vi.



To this must be added that the text consistently uses the infinitive ( $\overline{\text{m}}\overline{\text{n}}\overline{\text{e}}$ ) after the negative participle of *tm* instead of the negatival complement, a construction which according to GARDINER<sup>1</sup> is not found earlier than the 18th dynasty, and further such features as the constant use of the orthography  $\overline{\text{m}}\overline{\text{n}}\overline{\text{e}}$  even in the *sdm-hr-f* form of the verb, and the frequent omission of the  $\overline{\text{e}}$  of futurity (f. inst. I, 5 & I, x + 2), all evidences of an orthographic and grammatical nature which, collated with the general correct and classical appearance of the text, might assign it to the time about the 19th dynasty.

On the other hand, all these novagisms might very well be corruptions referable to copying scribes from later periods, and owing to the general appearance of the text and its beautiful classical character when taken as a whole, a somewhat earlier date from the classical period about the 12th dynasty or maybe even earlier may be a more probable dating of the original text.

This would correspond to the fact that texts of a similar character have already been found from that period among the papyri from Kahun.

#### Previous works on the tradition of the birth prognoses.

The whole group has been the subject of much attention from various Egyptologists from the very moment that BRUGSCH<sup>2</sup> published his first edition of the Berlin papyrus because, by chance, it happened to provide one of the easiest and most accessible ways of tracing a direct influence from ancient Egyptian medicine in the later European medical tradition.

<sup>1</sup> GARDINER, Egyptian Grammar §§ 344 & 397.

<sup>2</sup> BRUGSCH, Recueil de monument Pl. LXXXV—CLII p. 101.

First of all Le Page Renouf<sup>1</sup> demonstrated in a short note in the Zeitschrift, that one prognosis had a closely connected variant in a similar prescription found in Hippocrates, and that a variant of another prescription was current in English popular medicine as late as the 18th century; but most regrettably he never said anything definite as to his theories of how it got there.

A little later ERMAN<sup>2</sup>, succeeded in finding that a certain characteristic passage from a popular German pseudo-medical work from the 17th century was in absolute conformity with one of the prescriptions from the Berlin papyrus<sup>3</sup>, but here again the fact was merely recorded, no attempt being made to give any historical explanation of it.

It was not until EBERS wrote his article: "Wie Altägyptisches in die Europäische Volksmedizin gelangte"<sup>4</sup> that a definite step was taken in this direction.

EBERS succeeded in finding the same prescription which Le Page Renouf had found in the English folk-medicine among the works of CONSTANTINUS AFRICANUS<sup>5</sup>, a famous physician, one of the notables of the school of Salerno in the time about 1200.

Already LIEBLEIN<sup>6</sup> had drawn attention to this great medical centre, and had maintained that it had played a significant rôle for the spreading of Egyptian material into the later European tradition. And this is certainly true in

<sup>1</sup> Note on the medical Papyrus of Berlin. Zeitschrift für ägyptische Sprache 1873 p. 123.

<sup>2</sup> viz. Aegypten und Ägyptisches Leben im Alterthum 1886 Kap. 14.

<sup>3</sup> The prescription is No. 199 in WRESZINSKI's edition; among our fragments it is No. III.

<sup>4</sup> Zeitschrift für ägypt. Sprache XXXIII 1895 p. 1.

<sup>5</sup> De mulierum morbis, Opera, Basileae apud Henricum Petrum 1536.

<sup>6</sup> Bemerkungen zu Papyrus EBERS, Æ. Z. 1880.



so far as, being the main centre of the diffusion and propagation of the whole material from classical medicine, it must naturally have spread what was current of Egyptian material there at the same time, a fact which certainly says a lot about the significance of the school of Salerno for the development of later European medicine generally speaking, but, on sober reflection tells us very little about the significance of the Egyptian elements for the school of Salerno, and nothing whatever about the channels through which they arrived there.

Still EBERS went one step further.

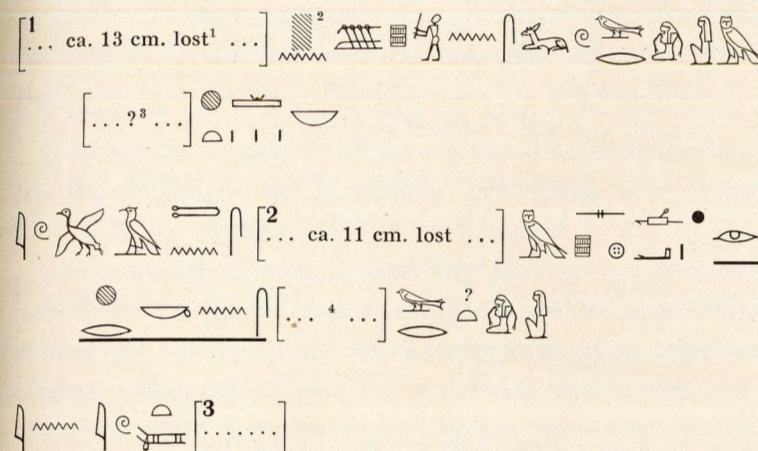
As he did not succeed in finding his prognosis earlier than CONSTANTINUS, he took this author to be the direct link between the Egyptian medical works and the school of Salerno, presuming that later lost Coptic and Arabian translations of the Egyptian originals had been accessible to him.

It will readily be admitted that this theory is too vague and hypothetical, and too complicated to be probable and that a transmission directly through the Greek medical tradition, without any foreign medium, would seem by far more simple and probable, and would be strongly supported if it were possible to trace Greek originals of our prescriptions from so early a date that a direct transition would seem the only probable explanation.

The commentary will show how far this is possible for the prescriptions contained in the present fragments.

## I.


## Pl. I, 1-3.






The inscription is so damaged here that any attempt to give a translation is a hopeless task.

The use of the verb *lwr* indicates, however, that the prescription did not deal with birth-prognoses like the rest of our fragments, but seems to have contained instructions concerning the furtherance of conception, or perhaps its prevention like similar prescriptions found in the Kahun papyri and the Berlin-papyrus<sup>5</sup>.

<sup>1</sup> For the length of the lacunae see the introduction.

<sup>2</sup> The traces do not seem to fit in with .

<sup>3</sup> Only 1½-2 groups are missing, but I cannot read the traces, they look like  and under  are the remains of a long sign probably  or the like.

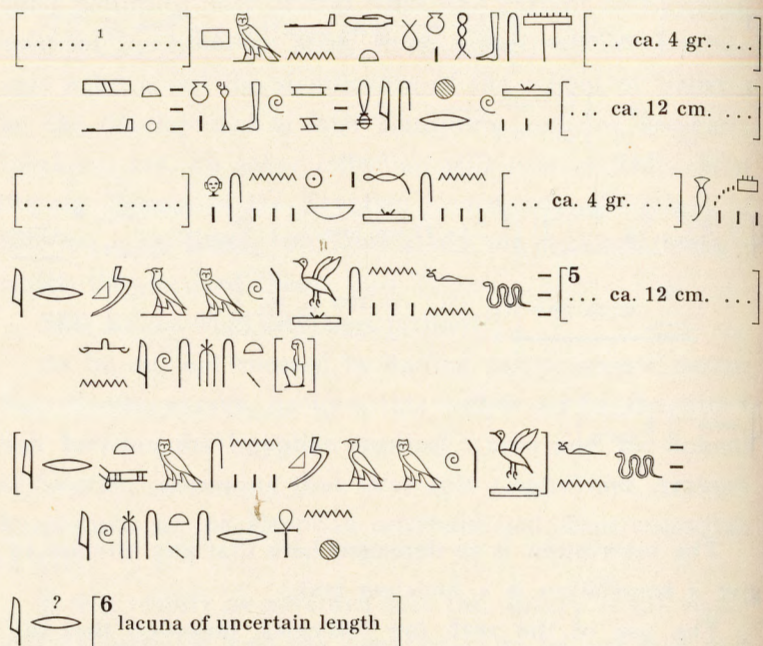
<sup>4</sup> Naturally   must be read.

<sup>5</sup> See e.g. No. 192 in the Berlin-papyrus and No. XX in the medical papyrus from Kahun.



## II.

## Pl. I, 3-5.



This prescription, too, is so damaged that a full reconstruction is a hopeless task.

It is, however, possible to give the original meaning with almost absolute certainty by comparing it with the following prescription No. III (see page 13) to which it is closely related.

It is then seen that: "You shall put something" (most probably the woman's excrements, as we shall see later) in bags of cloth (together with)<sup>2</sup> sand from the beach.

<sup>1</sup> etc. must be inserted at the beginning of the lost line.

<sup>2</sup> The Berlin-papyrus (Vs. II 3) has in the variant of the following prescription a which must stand for "together with", but this would hardly fill out the lacuna here.

(The woman shall pass her water)<sup>1</sup> upon the bags every day, they being filled with . . . . and dates.

If they produce worms, and . . . . she will not give birth. (If they do not produce worms) that which she shall bear<sup>2</sup> shall live.

We should, however, still have difficulties in understanding the details of the proceeding prescribed, were it not for the later reductions of the prescription.

As a matter of fact it turns out that our prescription here seems to have been recorded through the ages almost unchanged, and with all the characteristics of its Egyptian original preserved, as was the case with the famous prescription<sup>3</sup> whose German original ERMAN succeeded in finding; and in the very same Dreckapotheke which was ERMAN's source we find the following prognosis<sup>4</sup>:

"Nimm zwey Töpffen voll Kleyen/  
lasse Mann und Weib in jedes absonderlich seinen Harn /  
setze sie neun oder zechs Tage hin / dass sie fein  
stille stehen. In wessen Geschirr die Kleyen nun  
stinkend ist und Würme gefunden werden / an dem ist  
die Schuld."

which, in spite of all insignificant diviations, is obviously dependent on a direct tradition of the Egyptian original.

The prescription seems to have been rather a popular

<sup>1</sup> Perhaps is to be read, see the following prescription.

<sup>2</sup> *ms-t-s* is probably a prospective relative form. See GARDINER, Grammar § 387<sup>2</sup>.

<sup>3</sup> See the introduction and the notes to the following prescription.

<sup>4</sup> FRANZ PAULLINI, Neu Vermehrte heilsame Dreckapotheke, Francf. a. M. 1699 Kap. XXVI p. 243.







Of all the prescriptions contained in our fragments the present one is undoubtedly the most damaged, and it would have been absolutely impossible to get any meaning out of the scanty fragments had it not been for the parallel prescription found in the medical papyrus in Berlin<sup>1</sup>, from which the missing parts can be approximately restored, so as to make at least the general meaning of the inscription and its aim perfectly clear.

The prescription from the Berlin papyrus runs as follows:





If now we apply the knowledge obtained from this reduction to our fragment we are able to give the following outlines of a translation<sup>2</sup>:

*You shall put wheat and barley into purses of cloth, the women shall pass her water on it, every day. (it being mixed with dates and sand.) (If both sprout, she will give birth, if the wheat sprouts, she will give birth<sup>3</sup> to a boy (.....) (if the barley sprouts, she will give birth to a girl, if they do not sprout, she will not give birth at all.*

<sup>1</sup> Pap. Berlin 3038 Vs. II 2—5, WRESZINSKI: Der grosse Medicinische Papyrus des Berliner Museums. Berlin 1909. S. 47, No. 199.

<sup>2</sup> The meaning is as a whole quite clear and absolutely certain, though there can be doubt as to the correct reconstruction of the details.

<sup>3</sup> With an  left out after .

As for the history of this prescription, it was found by ERMAN<sup>1</sup> in the later so famous Dreckapotheke edited by FRANZ PAULLINI<sup>2</sup> where the wording is as follows:

*“Mache zwei Gruben in die Erde, wirffst in eine Gerste und in die andere Weitzen, in beyde aber giesse den Urin der Schwangern, und bedecke sie wieder mit Erden. Schiesst der Weitzen eher auff als die Gerste so wirds ein Sohn, kommt aber die Gerste eher empor so hastu eine Tochter zugewarten.*

It is beyond doubt that this prescription must be dependent on a tradition directly connected with the Egyptian original, and it has always been held to be so, but strangely enough it has proved absolutely impossible to find PAULLINI's sources, and even up to the present time the gap of about 2800 years between the two occurrences in the Papyrus of Berlin and the Dreckapotheke has never been filled out.

This is so much the more strange since PAULLINI himself gives his prescription as a quotation, and even mentions the name of the man on whose authority he quotes it, namely a certain PETER BOYER. And although almost all authors who have written on the subject quote the words which in PAULLINI's book are placed at the beginning of the prescription: *So spricht Peter Boyer* etc. nobody had ever paid any attention to the identity of this person, who has apparently been regarded as belonging to the great number of obscure local practitioners quoted elsewhere in the works of PAULLINI. On looking up the passage it turns out however, that it was only the edition from 1697 (ERMAN's source),

<sup>1</sup> First recorded in his *Aegypten und aegyptisches Leben im Altertum*, 1886, Kap. 14.

<sup>2</sup> PAULLINI op. cit. ERMAN used the edition 1687, Kap. 27, p. 248.



which spelled the name BOYER with an o, and even in this edition it was only spelled thus in one of the two cases where it occurs, being in the other place spelled with an e, as BEYER.

A misprint here presented itself as a possibility, and on looking it up in the edition from 1699 we saw that the name was here spelled with an a, as BAYER. On seeing the name spelled as PETER BAYER, the possibility of a connection with the pretty well known and renowned Florentine physician from the 16th century PETRUS BAYRUS, suddenly occurred to me, this person being highly esteemed and much quoted in almost all books on popular medicine from the middle of the 16th century, and on examining the most famous of his works: *De medendis humani corporis malis Enchyridion quod vulgo veni mecum vocant*, better known under the simple title of *Vademecum*<sup>1</sup> we find in the 15th book, Chapter V, what is beyond any doubt the Latin original of PAULLINI:

*"Aliud: fac duas faueas in terra, in una pone triticum in alia hordeum, et in utraque pone de urina pregnantis cooperiundo cum terra.*

*Si primo germinaverit triticum pariet filium si vero hordeum foemellam concepit."*

This being only the first link in a chain of traditions of nearly 3000 years, our second effort was concentrated on finding the sources of PETRUS BAYRUS.

As already mentioned in the introduction, EBERS had propounded a theory about the significance of the school of Salerno, and especially CONSTANTINUS AFRICANUS, for the introduction of the Egyptian material into later European medicine. But this theory, which operated with lost Coptic

<sup>1</sup> BASIL. 1563.

and Arabian translations of the Egyptian texts, seemed rather vague and unsatisfactory, and a direct transmission of the tradition through Greek medical literature seemed a priori by far more simple and natural.

It was our hope, therefore, to find a Greek occurrence of our prescription, and in an almost hopeless search in obscure Greek medical literature we happened to find some small fragments of a medical text *περὶ παρθενουσῶν*, published by BURSIA<sup>1</sup> under the name of Codex Paulinae Lipsiensis n. 175, and here we find a Greek redaction of our prescription in a form almost word for word identical with PETRUS BAYRUS' version:

*sic*  
*ἄλλον. λαβὼν τὸ οἶνον τῆς γυναικὸς καὶ δοῦξας βόθρονες δύο βάλλον εἰς τὸν ἕνα σῖτον καὶ εἰς τὸν ἄλλον κριθάρην καὶ ἐπίσταξον εἰς αὐτοὺς τὸ οἶνον αὐτῆς. καὶ ἂν πρῶτα ὁ σῖτος βλαστήσῃ, ἄρρεν τέσσεται, εἰ δὲ ἡ κριθή, θήλυ.*

Although we have thus been able to prove that the prescription was current in Greek medical literature, our difficulties are not at an end here, for the essential question of the age of these Greek versions still remains.

They are anonymous and, according to BURSIA<sup>1</sup>, nothing can be said with certainty about their age, except that they are closely related to similar prescriptions found in the third book *περὶ ἐντορίστων* which has been attributed to GALEN.

Our prescription has the following form:<sup>2</sup>

<sup>1</sup> CONRAD BURSIA: *Fragmentum Medicum Graecum*. In *Index Scholarum Hibernarum in Universitate Litterarum Jenensi*, Jena 1873.

<sup>2</sup> In KÜHN's translation (Kühn: *Medicorum Graecorum Opera*, Leipzig 1827, Vol. XIV, p. 476): *Aliud: Gravidae mulieris urinam accipiens duas faveolas facito, in unam hordeum, in alteram triticum conjicito, deinde*



πρὸς γινῶναι ἢ ἄρρεν ἢ θῆλυ τὸ ἐν γαστρὶ. ἄλλο. λαβὼν τῆς ἐν γαστρὶ ἐχούσης οὖρον ὄρνυον βοθρίσκους δύο καὶ εἰς τὸν ἕνα βάλε κριθὰς καὶ εἰς τὸν ἕτερον πυρούς καὶ ἐπίχρε γῆν μετὰ τὸ ἐμβαλεῖν τὸ οὖρον αὐτῆς, καὶ ἐὰν πρῶτον ἐκβλαστήσωσιν οἱ πυροί, ἄρρεν τέσσεται, ἐὰν δὲ αἱ κριθαί, θῆλυ.

Still we cannot date the fragments after GALEN, because it seems only to be in the popular tradition that the work quoted is attributed to him, and all that I have been able to find about their provenance is a remark by SCHOELL<sup>1</sup> that they were compiled by an unknown Greek in Byzantine days. This is not very much, but it is at any rate sufficient to prove that CONSTANTINUS AFRICANUS from about 1200 has had nothing to do with the direct tradition, and that the theory of his essential rôle as the direct medium through whom the Egyptian material was transmitted to European medicine must be abandoned.

Just one more interesting fact concerning the age and origin of our prescription must be quoted. We find in a compilation of works on gynecological subjects from the 16th century<sup>2</sup>, under the name of Moschion a treatise *περὶ γυναικείων παθῶν βιβλίον*, a variant of our prescription:

ἢ λαβὼν ἀγγεῖα δοτράκινα, καὶ σημειωσάμενος αὐτὰ ἀκριβῶς, βάλε εἰς αὐτὰ κριθὰν ἢ ὄρνυον. καὶ οὐρείτωσαν ὃ τε ἀνὴρ εἰς τὸ ἕν, καὶ ἡ γυνὴ εἰς τὸ ἕτερον. καὶ θές αὐτὰ εἰς τόπον ἐν ᾧ

urina conspergito atque ita demum terram superjacito, si prius triticum expullulaverit, mas pariet, sin vero hordeum, femina.

<sup>1</sup> SCHOELL quoted by BURSIA op. et loc. cit. Diese drei Bücher rühren von drei Verfassern her, welche alle von GALEN verschieden sind. .... das dritte ist das Werk eines Griechen aus der Zeit des byzantinischen Kaisertums.

<sup>2</sup> CASPAR WOLFF: *Gynaeciorum sive de Mulierum affectibus Commentarii*, Basileae 1586, No. 162.

ἔστι κατάψυχον, ὥστε ἄχρῃ ἑπτὰ ἡμερῶν μηδὲ ὅλως παρασαλεῖν θῆναι. τῇ δὲ ἐβδόμῃ εὐγαλον αὐτὰ καὶ ἴδε. καὶ ἐὰν βλαστήσωσιν τὰ ἀμφοτέρω, γόνιμοί εἰσι. εἰ δὲ ἐν ἑξ αὐτῶν οὐ βλαστήσῃ, ἐκείνος ἐστείρωται.

It will be seen that the sex determination is left out, but the fact that two different sorts of corn are to be used sufficiently demonstrates its dependence on the Egyptian original.

As already mentioned the treatise is attributed to Moschion, who was a Greek physician from the first centuries A. D., but ILBERG has shown<sup>1</sup> that this is an ancient mistake, due to a confusion of the names of Moscion and a Byzantine physician Muscion or probably Mustio who lived about 700 A. D. and that the treatise is nothing but a Byzantine translation of the Latin translation of a work of the Greek physician Soranos, made by the aforementioned Mustio.

A fact that makes the whole problem still more intricate and puzzling, however, is that our particular prescription, together with the remaining prognoses found towards the end of the work, does not originate from Soranos at all<sup>2</sup>, and must be an addition borrowed elsewhere either by Mustio himself or by his source.

The salient point, however, is that this version of the prescription also seems to be of Byzantine origin.

We have already seen that the pseudo-Galenian work in which we first found our prescription was compiled by an unknown Greek, probably of Byzantine origin, and to

<sup>1</sup> Die Gynaecologie des Soranos von Ephesos. Schriften der Königl. Sächsischen Gesellschaft der Wissenschaften. phil.-hist. Classe XXVIII, Lips. 1911. page 5 ff. and p. 9 ff.

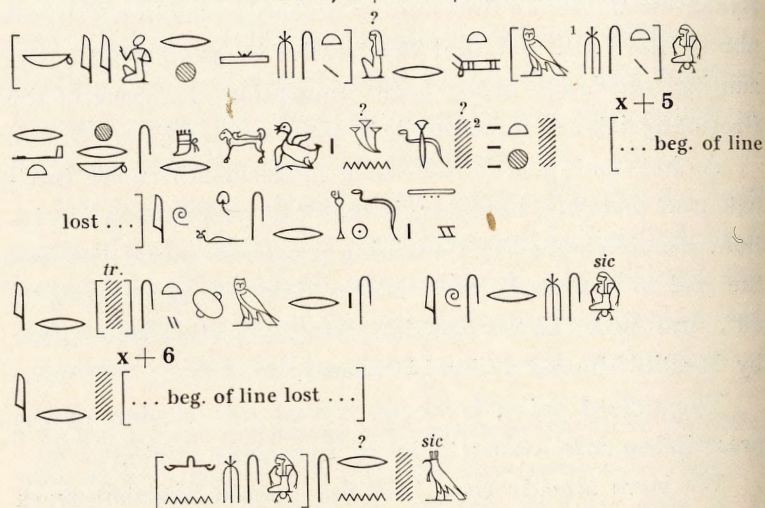
<sup>2</sup> ILBERG does not mention them, and they are left out in Rose's edition. Rose, *Sorani Gynaeciorum vetus translatio latina*. Lips. 1882.



presume a common Greek source for both occurrences seems a probable and natural consequence.

At the present stage all that can be said about the earlier history of our prescription appears to be, that it seems as if a Greek version, very closely related to the Egyptian original, has been current in Greek medicine in the days of the Byzantine Empire, and that it must be hoped that a scholar with a better knowledge in this field will be able to trace it further.

## IV.

Pl. I,  $x + 4 - x + 6$ .

<sup>1</sup> Probably thus, as in line  $x + 6$ .

<sup>2</sup>  $\times$  seems certain.

<sup>3</sup> might fit in with the traces, or but if *pr* should be the reading the gemination should provide difficulties.

<sup>4</sup> Some strange writing for seems to be indicated by the bird.

Again we are dealing with a prescription so damaged that no translation can be given, and where it even seems impossible to indicate the general outlines of the proceeding.

We do not get very much help, either, from the related material in the Egyptian medical literature, though there are good reasons for believing that prescription No. XXVIII in GRIFFITH's edition of the medical papyrus from Kahun is a closely connected variant. but in this place the Kahun papyrus is in such a condition that it offers no real help at all.

It is not until we compare our prescription with a similar one from Hippocrates that the meaning and the whole proceeding becomes perfectly clear.

The prescription is found in the third book *περὶ ἀφόρων* cap. 214<sup>1</sup> where it has the following form:

ἄλλο. μῶλυνζαν σκορόδου περικαθήραντα τὴν κεφαλὴν ἀποκνίσαντα, προσθεῖναι πρὸς τὴν ὑστέρην, καὶ δοῖν τῇ ὑστεραίῃ, ἣν ὄζει διὰ στόματος, καὶ ἣν ὄζει, κνήσει, ἣν δὲ μή, οὐ.<sup>2</sup>

In applying the proceeding thus obtained to our own prescription we shall see that the meaning becomes perfectly clear, and that some of the missing parts can be restored with the greatest probability:

*Another to distinguish a woman who will give birth from one who will not<sup>3</sup> give birth.*

<sup>1</sup> *περὶ ἀφόρων* lib. III 214. ed. LITTRÉ: Oeuvres d'Hippocrate. Paris 1839. Vol. VIII p. 416.

<sup>2</sup> In LITTRÉ's translation op. cit. p. 417. Autre: gousse d'ail, la nettoyer, en oter les peaux, l'appliquer en pessaire, et voir le lendemain si la femme sent l'ail par la bouche; si elle le sent, elle concevra; sinon, non.

<sup>3</sup> With the infinitive after *tm*, see note 2 in the following prescription.

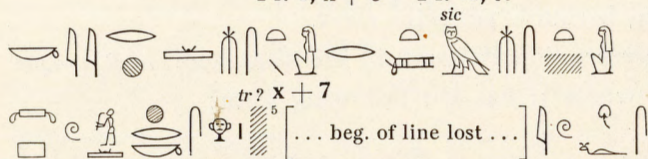


You shall let an union bulb<sup>1</sup> (moistened?<sup>2</sup> with ..... ) remain the whole night (on her vulva?<sup>3</sup>) until dawn.  
If the smell passes through?<sup>4</sup> her mouth, then she will give birth, if (.....) she will not give birth.



Thus we have here one of the extremely rare concrete examples of a direct influence from Egyptian Medicine in the Greek medical literature as far back as Hippocrates.



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

Pl. I, x + 6 — Pl. II, 1.



























<sup>1</sup> Thus Griffith in the edition of the Kahun papyri op. cit. No. XXVIII p. 10 a translation which is almost proved by the Greek context.

<sup>2</sup>  might be the remains of  indicating that the bulb should be moistened with some fluid or other before being administered.

<sup>3</sup> *iwf.s* which undoubtedly corresponds to  in the Kahun text, seems almost to stand where the word  vulva would be expected, and not only here, but also in the following prescription (I. x + 7).

Is it possible that   "flesh" could be used simply as a Euphemism for *k3.t* "vulva"? For a similar and parallel use of the word "flesh" in Hebrew see LEVITH. 15, 2.

<sup>4</sup> The reading *hpr* seems the most probable, so the correct translation should be: "If the smell is present in her mouth".

<sup>5</sup> Probably    or the like is to be restored as in No. 195 in the papyrus from Berlin. For the construction of *k3p* with two  compare Berlin Vs. I, 1        "             .





Another to distinguish between a woman who shall give birth and one who shall not.<sup>2</sup>





You shall fumigate her with (excrements of hippopotamos through) her vulva.<sup>3</sup>





If she vomits with her mouth at once<sup>4</sup>, she will not give birth<sup>5</sup> if she gets flatus from her posterior at once then she will give birth.

This prescription belongs to a group where a fumigation from underneath, takes place, and where the omen is taken from the facts of the woman either vomiting or getting borborygms; it is closely related to the foregoing one

<sup>1</sup>  is certain, but must be a mistake; the verb is undoubtedly .

<sup>2</sup> With the Infinitive after *tm* instead of the negational complement GARDINER, Grammar §§ 344 & 397.

<sup>3</sup>   is found here as in the foregoing prescription where  "vulva" should be expected, and is perhaps to be regarded as a Euphemism.  must be supplied before it.

<sup>4</sup> I do not know this adverbial phrase from other texts. It seems to correspond to   in the Berlin-papyrus and to   in the papyrus from Kahun (see for inst. No. XII in GRIFFITH's ed.).

<sup>5</sup> A very beautiful example of *nn sdm. f* as a negative equivalent to *iw. f r sdm.*



since both seem to presume some connection between the uterus and the intestinal system.

As for its occurrence we find a parallel in No. 195 in WRESZINSKI's edition of the Berlin-Papyrus, but as far as I know no examples of a later redaction have ever been found. On searching the Aphorisms of Hippocrates<sup>1</sup> we find, however, the following prognosis which is nothing but a variant of our prescription:

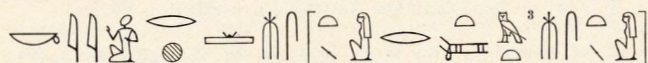
Γυνή ἢν μὴ λαμβάνῃ ἐν γαστρὶ, βούλη δὲ εἰδέναι εἰ λήψεται,  
περικαλύψας ἑματίοισι, θυμία κάτω, κῆν μὲν πορεύεσθαι δοκῇ  
ἢ ὁδμὴ διὰ τοῦ σώματος ἐς τὸ στόμα καὶ ἐς τὰς ῥίνας, γίνω-  
σκε ὅτι αὐτὴ οὐ δι' ἐκωτὴν ἄγονός ἐστιν.

The proceeding is, as will be seen, the same as in the Egyptian text but the symptoms are different, being those known from the foregoing prescription.

Anyhow, the two redactions are so closely related that they still bear strong evidence of the direct connection between the early Greek medical literature and Egyptian medicine.

## VI.

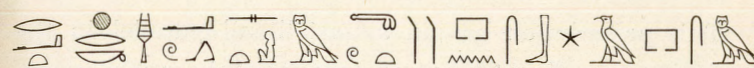
### Pl. II, 1—3.



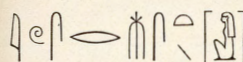
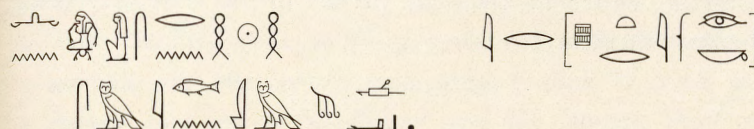
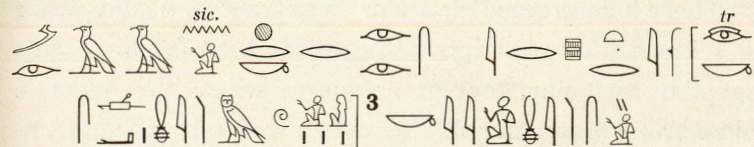
<sup>1</sup> Hippocrates' Aphorisms ed. JONES. London 1931 (Loeb).

<sup>2</sup> In JONES' translation p. 175: If a woman does not conceive, and you wish to know if she will conceive, cover her round with wraps, and burn perfume underneath. If the smell seems to pass through the body to the mouth and nostrils, be assured that the woman is not barren through her own physical fault.

<sup>3</sup> Thus II, 4.



[... ca. 3½ gr. ...]





Another to distinguish etc.





You shall let the women stand in her doorway (.....)

You shall examine<sup>2</sup> her eyes. If you see one<sup>3</sup> of these as an Asiatic, the other as a Negro, then she will not give birth, If you see them<sup>4</sup> of one<sup>5</sup> colour, then she will give birth.

<sup>1</sup> This would fill out the lacuna and correspond to the parallel sentence in line 3 *ir ptr.k sj* etc.

<sup>2</sup> As for the strange spelling with  between the stem and the formative element, I can only refer to the strange  exceptionally occurring in the *sdm. f* form of the same verb, due to some change of *s* into *n*. GARDINER, Grammar § 439, but its occurring in a *sdm. hr. f* form, and the gemination is a puzzling fact.

<sup>3</sup> Literally: if you see them, one like etc., the other like, where *s* stands for the dualis *sj*.

<sup>4</sup> The parallel in the Berlin-papyrus has     which has caused some misunderstandings in WRESZINSKI's translation and commentary.

<sup>5</sup> For this construction see ERMAN, Neuaegyptische Grammatik § 723 Ann.

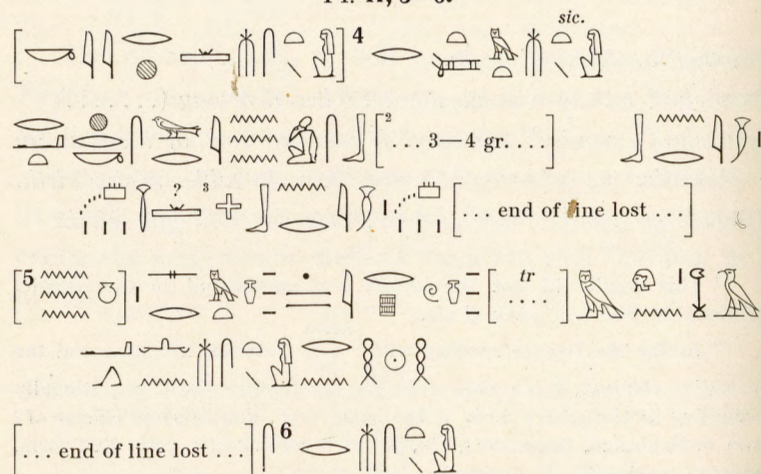


This prescription has an almost literal parallel in the Berlin-Papyrus No. 198, but on certain points our fragments give a better text.

The whole proceeding seems rather obscure, and as far as I know, the prescription has never been found outside Egyptian medicine, though prognoses where the omen is taken from the colour of the eyes are by no means uncommon either in classical Greek<sup>1</sup> or in later European medical literature.

## VII.

### Pl. II, 3-6.



<sup>1</sup> See e.g. Hippocrates *περί ἀφόρων* III 215 in LITTRE's edition op. cit. 416.

<sup>2</sup> Most probably [Hieroglyphs] or may be *bdd*. alone is to be restored after the parallel in the Berlin-papyrus.

<sup>3</sup> The reading [Hieroglyphs] is not quite certain, but compare [Hieroglyphs] in Berlin XV, 7.

*Another to distinguish etc.*

*You shall let her drink [...], fresh dates and [...]*

*[...] dates, Sermet, wine [...]*

*If she vomits with her mouth at once, then she will give birth.*

*If she gets borborygms, she will not give birth.*

Although the materials are different, the prescription is clearly related to No. 193 in the Berlin-papyrus, where it is said: *Water-melons, squeezed, moistened with the milk of a woman who has born a male child, it shall be made into a remedy that can be swallowed, and the woman shall eat it. If she vomits she will give birth, if she gets flatus, then she will not give birth.*

Already LE PAGE RENOUF<sup>1</sup> pointed out that this prescription from the Berlin papyrus is identical with a prognosis from Hippocrates where the same characteristic remedy, "milk from a woman who has born a male child", is used together with some other materials, to procure similar symptoms<sup>2</sup>.

It is clear, however, that our prescription is only a variant; milk is not used at all, and the materials employed are all different, a characteristic feature being that most of them appear to be sweets.

This connects the prescription with another Hippocratic prognosis, the famous hydromel test, which is found in the Aphorisms<sup>3</sup> in the following form:

<sup>1</sup> LE PAGE RENOUF, Note on the medical papyrus from Berlin, *Æ. Z.* 1873 P. 123.

<sup>2</sup> This was the only example of a direct connection between Egyptian and Greek medicine as early as Hippocrates before the foregoing prescriptions were found.

<sup>3</sup> Hippocrates' Aphorisms, ed. JONES (Loeb.) London 1931 No. XLI p. 168.



γυναῖκα ἣν θέλης εἰδέναι εἰ κύει, ἐπὶν καθεύδειν μέλλῃ, ἀδει-  
πνω εὐόσῃ μελίκροτον διδόναι πιεῖν, καὶ μὲν στρόφους ἀντὶν  
ἔχει περὶ τὴν γαστέρα, κύει, ἣν δὲ μή, οὐ κύει.

Before concluding we shall just draw attention to another birth-prognosis, which is rather significant because it strongly supports the theories as to the Egyptian origin of the greater part of the current prescriptions belonging to this group.

It is very wide-spread being found in almost all popular books on gynecological subjects and midwifery.

To quote a book which has played rather a significant rôle as the source of a great many later authors, we shall give it as KUNRATH has it in his *Medulla Destillatoria*:<sup>1</sup>

*"Es wird auch sonst fuer gewiss gehalten dass dadurch erfahren wird ob eine Frau moege Kinder zeugen oder nicht, wenn man ihren Harn auf wilde Pappeln giesst, verdorren die Pappeln am dritten Tage so ist sie unfruchtbar."*

CULPEPPER<sup>2</sup> in his translation of Riverius uses bran or fennugreek for the experiment, and WALTHER RYFF<sup>3</sup> recommends: Pappeln, Nesselkrut, Bonen oder Gerste, so as to prove that the prescription is nothing but a variant of our prescription No. III, the sex determination being left out.

It is further found in the works of AVICENNA<sup>4</sup> *"Fundantur duae urinae super lactutam & ex illo est defectus*

<sup>1</sup> KONRAD KUNRATH, better known as Conradus. *Medulla Destillatoria et Medica* Hamburg 1603 p. 103.

<sup>2</sup> The Practice of Physic. Being chiefly a translation of the works of that Renowned Doctor LAZARUS RIVERIUS London MDCLXXII p. 505.

<sup>3</sup> W. RYFF. *Schwangerer Frauen Rosengarten* (1545), here the edition 1561 p. 9.

<sup>4</sup> AVICENNA Lib. III Fen 21. Cap. 9.

*cujus urina exsiccuaverit eam.*", but I have been unable to find it in the Greek medical tradition, though it is beyond any doubt that it exists or has existed<sup>1</sup>.

The point is, however, that we are able to show what seems to be the Egyptian original of the prognosis. It is found in the demotical magical Papyrus<sup>2</sup> and it runs thus in GRIFFITH's translation: *"The way to know it of a woman whether she is enceinte: you make the woman pass her water on this herb as above again in the evening; when the morning comes and if you find the plant scorched she will not conceive; if you find it flourishing, she will conceive."*

The identity of the prescriptions is beyond all doubt and even the translation of the word *shlclt* which GRIFFITH with some doubt gave as "scorched" is beautifully confirmed by "exsiccuaverit".

### Conclusion.

To give an idea of what the present fragments and our historical examination mean for our knowledge of Egyptian birth-prognoses generally, we shall beg leave to sum up briefly the results obtained.

It has been seen that our fragments are closely connected, as well with the prognoses found in the medical papyrus from Kahun, as with those from the Berlin medical papyrus, so that in a certain way they combine the two texts in the tradition, by giving redactions of prescriptions from both.

This in itself is a significant fact, because it proves that the birth-prognoses in the Egyptian medical literature can

<sup>1</sup> The prescription mentioned p. 18 from CASPAR WOLFF's edition is, however, so closely related that it might very well be quoted as a Greek occurrence.

<sup>2</sup> GRIFFITH, the Demotical Magical Papyrus London 1904 Verso V, 4.



no longer be regarded as sporadic, more or less accidental, occurrences, but must be considered scattered extracts from a greater gynecological compilation, current in the tradition until the latest days of Egyptian history, but subsequently lost par l'injure du temps, the only remains being the birth-prognoses, the very few gynecological fragments preserved elsewhere in Egyptian medicine, and the material transmitted to the Greeks and there preserved down through the ages.

That such a gynecological treatise really did exist in ancient Egypt is explicitly recorded by CLEMENS ALEXANDRINUS<sup>1</sup>, who says that the Egyptian medical literature consisted of 6 canonic volumes of which the last one exclusively dealt with gynecological subjects. The last but one, the fifth, contained a treatise on the eyes, and it certainly seems to be more than a curious coincidence that this is exactly the text found on the much damaged recto of our papyrus.

Thus there seems to be good evidences of the existence of this volume in ancient Egyptian medicine; and that the birth-prognoses are direct remains and the only existing excerpts of any extension, would seem to be only a natural and probable conclusion.

As for the second problem, about the channels by which the prescription were introduced into European popular medicine, we have already mentioned in the introduction what we should consider the proper solution: a direct transmission without any foreign medium of the Egyptian material to Greek medicine, together with which the Egyptian material has spread all over mediaeval Europe, and has been introduced into the later medical tradition.

<sup>1</sup> CLEMENS, *Stromata* lib. VI cap. 35—37.

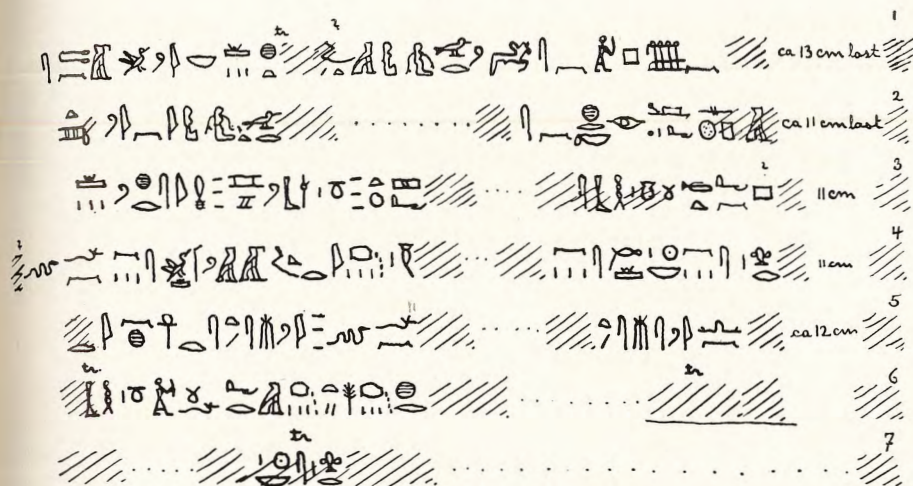
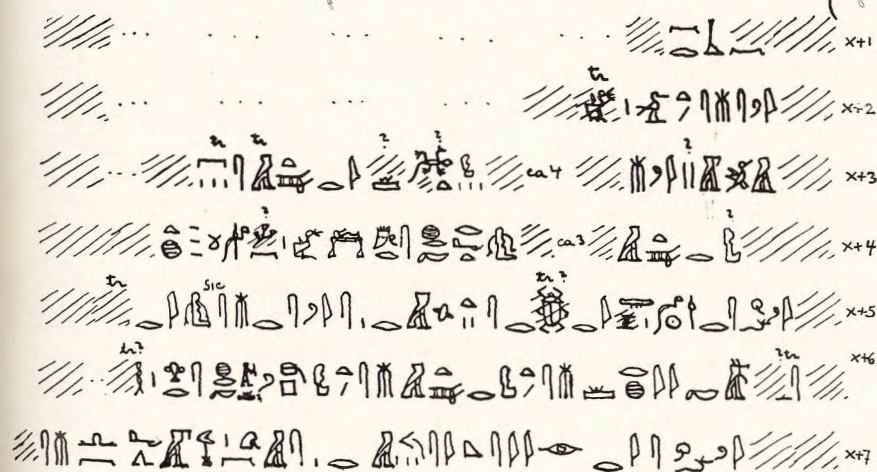
To maintain this theory against the old one, according to which the prescriptions should have been introduced via the school of Salerno as late as CONSTANTINUS AFRICANUS, it was necessary to ascertain whether it would not be possible to trace some earlier Greek occurrences of our texts<sup>1</sup>. It turned out that it was possible not only to find the Greek original of CONSTANTINUS, dating from a period at any rate c. 500 years before that of CONSTANTINUS himself, and thus once for all to reduce him and the School of Salerno to mere links in an unbroken tradition but it proved possible to quote later European redaction of five out of the six birth-prognoses contained in our fragment, all five of which could be pointed out in the Greek medical literature either directly or in closely related variants, no less than three being as early as the time of Hippocrates, that is, from a date when the intercourse between Egypt and Greece was so highly developed that a direct interchange does not provide any difficulties.

When this has been admitted it is only a modest assertion to claim that the other Egyptian prescriptions found in later Greek and in mediaeval medicine have passed through paralld channels, even if they have not yet been found as far back as the time of Hippocrates.

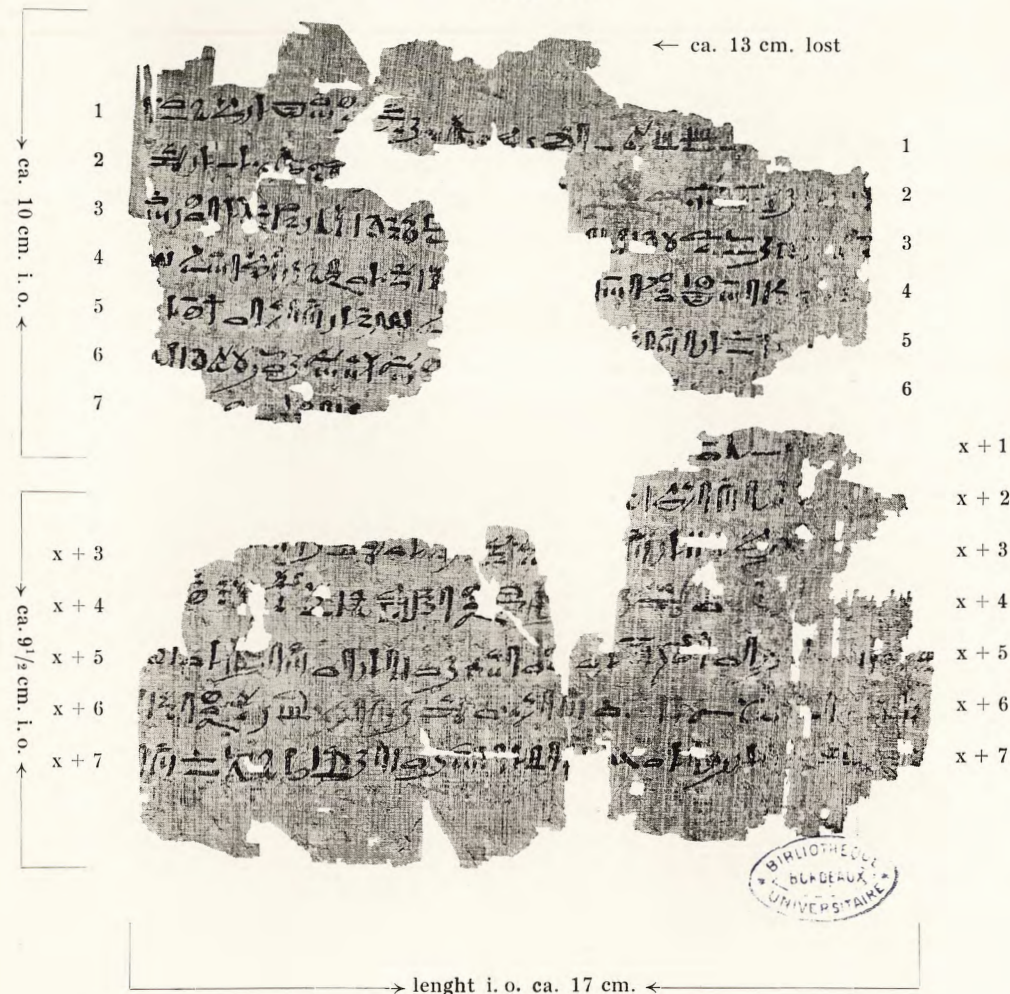
<sup>1</sup> As already mentioned one had been found by LE PAGE RENOUF.



## Fragment A

[an uncertain number of lines missing]<sup>1</sup><sup>1</sup> probably not more than one x + 1 might even be the beginning of line 7.

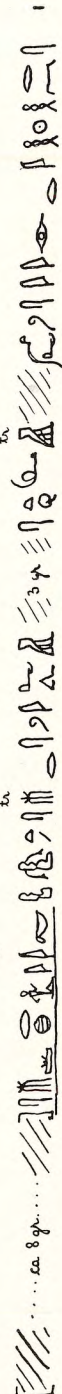

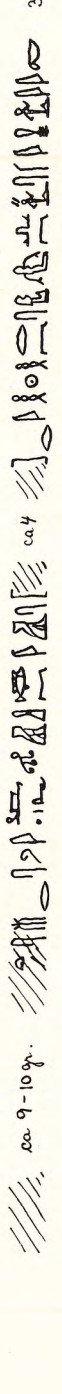
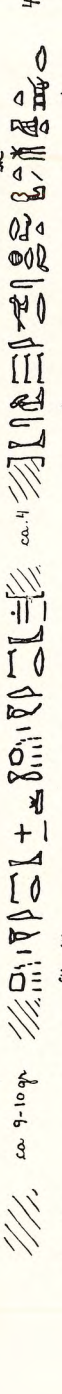
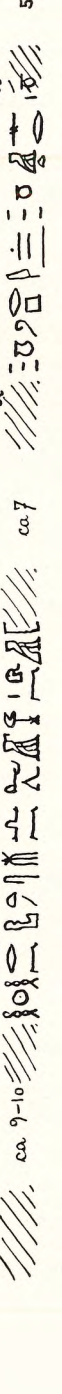

## Fragment A

BIBLIOTHEQUE  
BLAISEUX  
UNIVERSITAIRE



Fragment C

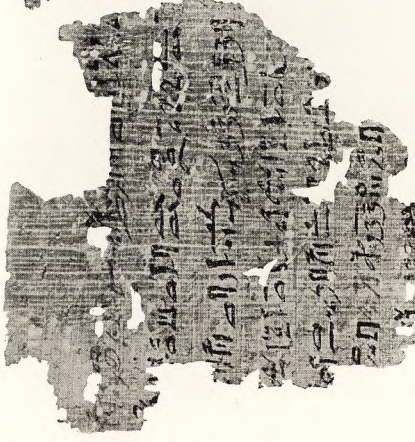
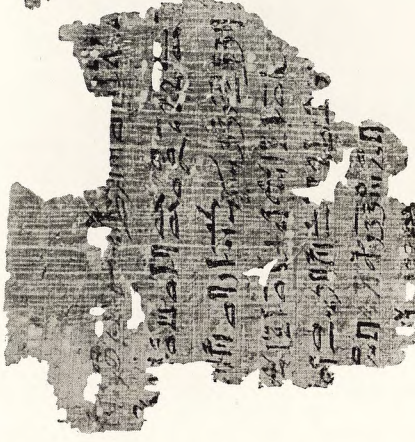
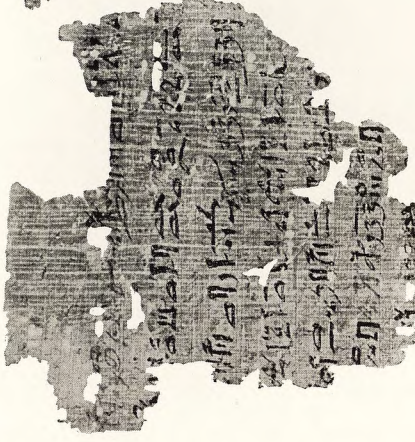
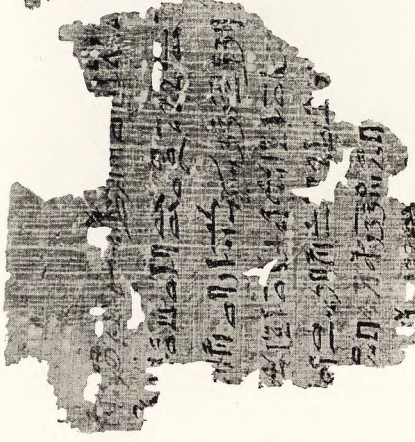
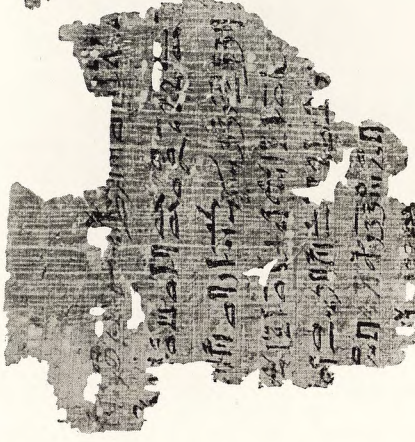
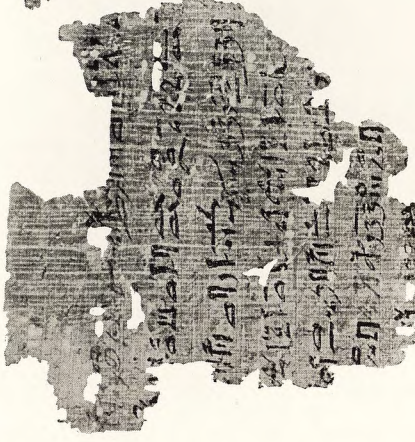
Fragment B

1    
 2    
 3    
 4    
 5    
 6 

the prognoses end here.

Fragment C

Fragment B

1    
 2    
 3    
 4    
 5    
 6 

ca. 7 cm. lost

ca. 10 cm. i. o.

length i. o. ca. 23 cm.

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